

**Assessment of global warming on Indian climates**

1175. SHRI RAHUL BAJAJ: Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether an assessment of likely impact of global warming on Indian climate has been made;
- (b) if so, what are its major findings; and
- (c) if not, the reasons therefor?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): (a) Yes, Sir.

(b) Impact of global warming on future climate change in India have been evaluated by Indian scientists through climate predictions based on different scenarios of global trends in Greenhouse gas emissions, which have been agreed to by the Inter Governmental panel on climate change. The results are obtained from Global Model simulations followed by Regional simulations to get results relevant to the Indian region. It must however be noted that these results can only be considered as preliminary at the present stage and efforts are being continued by the scientific community to obtain more reliable estimates.

In the case of mean annual temperature for the country as a whole, an increase of the order of 2°C to 5°C is projected to occur by the end of this century based on the model results. Examination of the spatial patterns of annual temperature changes indicates that the warming will be more pronounced over the northern States of India and eastern parts of the peninsular region. It is estimated to be more during winter and post monsoon seasons compared to the rest of the year.

Prediction of rainfall changes is less reliable than that of temperature. The global results indicate that there is likelihood of increase in annual mean rainfall to the tune of 15-40 per cent till the end of the 21st century as compared to the baseline period 1961-1990. The maximum change in rainfall is projected to occur over the climatologically low rainfall region of north-western India. Considering monsoon season separately a decrease in rainfall in the western parts of the country and a corresponding increase in the eastern parts is projected.

The Central and western parts of the country show a reduction in the number of rainy days by middle of present century indicating that heavier precipitation events could become slightly more frequent in the non monsoon months.

As on date the observed trends in temperature are qualitatively similar to the predicted model results but the rainfall data does not show any significant trend except that a marginal reduction in rainfall of Central has been noticed during the recent decade.

(c) Does not arise.

### **Maintenance of food products**

†1176. MISS ANUSUIYA UIKEY:

SHRI RUDRA NARAYAN PANY:

Will the Minister of FOOD PROCESSING INDUSTRIES be pleased to state:

(a) whether food products get rotten and become useless in absence of their maintenance; and

(b) if so, the details of the efforts being made by Government to prevent the same?

THE MINISTER OF STATE OF THE MINISTRY OF FOOD PROCESSING INDUSTRIES (SHRI SUBODH KANT SAHAY): (a) and (b) Food is a perishable item and it can be preserved by processing. For promoting food processing, Ministry of Food Processing Industries is operating various Plan schemes to provide financial assistance in the form of grant-in-aid for Technology upgradation / Modernization / Establishment of food processing units, Development of Infrastructure, Human Resource Development, Promotion of Quality Assurance, Codex Standards, R&D, besides for other promotional measures to encourage development of the food processing industries.

### **Investment in Food Processing Sector**

†1177. SHRI RUDRA NARAYAN PANY:

MISS ANUSUIYA UIKEY:

Will the Minister of FOOD PROCESSING INDUSTRIES be pleased to state:

(a) the details of investment likely to be made on food processing sector during the Eleventh Five Year Plan;

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<sup>t</sup>Original notice of the question was received in Hindi.